CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

RESOLUTION NO. ___

ALLOWING AN EXEMPTION FOR AN ENGINEERED RESIDENTIAL WASTEWATER DISPOSAL SYSTEM UNDER WASTE DISCHARGE REQUIREMENTS ORDER NO. 85-039 FOR

924 SIERRA BROOKS DRIVE (LOT NO. 116) SIERRA BROOKS SUBDIVISION UNIT 2A, LOYALTON SIERRA COUNTY

WHEREAS, Water Code Section 13260(a) requires that any person discharging wastes or proposing to discharge wastes within a region that could affect the quality of waters of the State shall file a Report of Waste Discharge (RWD); and

WHEREAS, the Central Valley Regional Water Quality Control Board (hereafter "Regional Water Board") adopted Waste Discharge Requirements (WDRs) Order No. 85-039 for the Sierra County Service Area No. 5, Zone 5A (Sierra Brooks Subdivision) on 22 February 1985; and

WHEREAS, Order No. 85-039 prescribes minimum site requirements (percolation rate, depth to water, ground slope, and set backs to water bodies and water wells) for sewage disposal on all 389 lots within the subdivision; and

WHEREAS, Discharge Prohibition A.1. of WDRs Order No. 85-039 states, in part: "An exemption may be approved by the Regional Board if a report is prepared by a civil engineer registered in the State of California, supporting the engineering conclusion that a septic tank/leaching system on the parcel(s) in question will provide adequate treatment and disposal....The report must be approved by the Sierra County Health Department and the Regional Water Board before an exemption may be issued"; and

WHEREAS, the Regional Water Board proposes to grant an exemption for an engineered residential wastewater treatment and disposal system for Lot No. 116 at 924 Sierra Brooks Drive, Loyalton (APN 016-180-022) in the Sierra Brooks Subdivision under the terms and conditions of WDRs Order No. 85-039; and

WHEREAS, Regional Water Board staff has reviewed the engineered residential wastewater treatment and disposal system design report submitted by DMAC Engineering Inc., dated 26, July 2002, 31 December 2002, 1 July 2003, 9 October 2003, 24 May 2004, 3 February 2005, 12 March 2007, and 6 February 2008; and

WHEREAS, the primary concern with residential wastewater disposal on this lot (and many other lots in the subdivision) is inadequate groundwater separation and high housing density. Evidence of seasonal high groundwater at 56 inches (about 4.5 feet) below ground surface (bgs) was reported for this lot. Order No. 85-039 requires a minimum of 60 inches (5 feet) of soil separation between the bottom of leachline trenches and water, rock, or the first impervious layer; and

WHEREAS, the proposed engineered on-site wastewater treatment and disposal system will consist of a septic tank, effluent filter, pump tank, and pressure-dosed mound system for a three-bedroom residence. Wastewater will be pre-treated in a 1,500-gallon septic tank. From the septic tank effluent will gravity flow to a 1,000-gallon pump tank with an effluent filter and an automatic bell siphon. Pretreated effluent will then be distributed to an engineered mound leaching system for disposal. The mound will be constructed of clean septic sand, infiltrator panels, and native soil. The mound will be constructed such that there is a minimum of five feet of soil separation between the bottom of the infiltrator panels and evidence of high groundwater. Six infiltrator panels will be placed within the mound distribution bed. The panels (three feet wide by 81 feet long) will be spaced seven feet on center. Clean septic sand will be placed between the panels. Filter fabric will cover each panel and there will be a minimum of 12 inches of capping fill placed above the filter fabric. Pressure distribution of effluent to the infiltrator panels should provide even distribution across the disposal area. The design is based on an average percolation rate of 17.4 minutes per inch and a peak flow of 450 gallons per day; and

WHEREAS, Regional Water Board staff has reviewed the design report and concurs that the engineered system design, with conditions, will provide adequate treatment and disposal of domestic wastewater for the proposed residence; and

WHEREAS, the engineered system design and conditions recommended by Regional Water Board staff should ensure the long-term protection of water quality; and

WHEREAS, the action to grant this exemption under WDRs Order No. 85-039 for this existing facility is exempt from the provisions of the California Environmental Quality Act (CEQA), in accordance with Title 14, California Code of Regulations (CCR), Section 15301; and

WHEREAS, the Sierra County Health Department has reviewed and approved the engineered system design report, including the conditions recommended by Regional Water Board staff; and

WHEREAS, the Regional Water Board considered all testimony and evidence at a public hearing held on 13/14 March 2008 in Sacramento, California.

RESOLVED, that the California Regional Water Quality Control Board, Central Valley Region, finds as follows for the residence at 924 Sierra Brooks Drive:

1. The engineered system shall be installed as described in the engineered system design report submitted on 6 February 2008 (Sheets 5,6,and 7), and in accordance with the following conditions:

- a. The septic tank and pump tank shall be manufactured in accordance with the American Society of Testing and Materials (ASTM) C1227 Standard Specification For Precast Concrete Septic Tanks;
- b. Tank lids and all tank penetration points shall be sealed to prevent inflow and infiltration from surface water and groundwater;
- c. A minimum set back distance of 5 feet shall be maintained between all property lines and the base of the mound system;
- d. The alternate disposal area system shall be installed at the same time as the primary disposal area system;
- e. The bottom of each distribution bed shall be level;
- f. Each distribution pipe shall be level; and
- g. Testing of the siphon system shall be performed to verify even distribution to all distribution lines across primary and alternate disposal areas before the capping fill is placed.
- 2. The engineered system shall be operated and maintained in a manner consistent with the following conditions:
 - a. Erosion of the mound fill shall be prevented and controlled to the maximum practical extent;
 - b. Vegetation grown on the mound must be selected and maintained to prevent invasive root systems growing within the disposal bed; and
 - c. The engineered wastewater treatment system shall be operated and maintained in accordance with the manufacturer's recommendations.
- 3. The following additional conditions shall apply:
 - a. The residence shall contain no more than three bedrooms;
 - All plumbing fixtures associated with the dwelling shall be low-flow fixtures;
 - During construction of the proposed residence and wastewater disposal system, a stub-out shall be provided for future connection to a community collection system;

- d. The residence shall be connected to a community wastewater collection, treatment and disposal system if the alternative system fails and a community system is operational; and
- e. Conditions of this Resolution and those required by Sierra County Health Department shall be recorded as a Deed Restriction to notify future owners that this property uses an engineered on-site residential wastewater treatment and disposal system, and that maintenance as recommended by the manufacturer shall be performed by a licensed contractor.
- 4. An exemption under Waste Discharge Requirements Order No. 85-039 is granted for the engineered residential wastewater disposal system, with the above conditions, for Lot No. 116 at 924 Sierra Brooks Drive, Loyalton (APN 016-180-022) in the Sierra Brooks Subdivision.

I, PAMELA C. CREEDON, Executive Officer, d and correct copy of a Resolution adopted by th	, , , , ,
Board, Central Valley Region, on 20	j
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	PAMELA C. CREEDON, Executive Officer

BPK: 19 February 2008